

CURRICULUM VITAE
JOSÉ MARÍA CANTARERO LÓPEZ

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RESEARCH INTERESTS: Algebraic topology, more specifically homotopy invariants of classifying spaces of topological groups and invariants of spaces with group actions, such as equivariant K-theory.

EDUCATION

- 2004-2009 Ph.D. in Mathematics.
University of British Columbia, Vancouver, Canada.
Thesis: Equivariant K-theory, groupoids and proper actions.
Supervisor: Alejandro Adem.
- 2000-2004 Bachelor of Science in Mathematics.
Universidad de Málaga, Spain.

EMPLOYMENT

- 2011-Now Szegö Assistant Professor, Stanford University, Stanford, USA.
- 2010-2011 Samelson Postdoctoral Fellow, Stanford University, Stanford, USA.
- 2009-2010 Postdoctoral Fellow, Centre de Recerca Matemàtica, Barcelona, Spain.

AWARDS, FELLOWSHIPS AND HONORS

- 2008-2009 International Partial Tuition Scholarship, University of British Columbia.
- 2006-2007 University of BC Graduate Fellowship, University of British Columbia.
- 2004-2005 Graduate Entrance Scholarship, University of British Columbia.
- 2004-2008 Tuition Fee Award, University of British Columbia.
- 2004 Top University Transcripts by the Real Maestranza de Caballería de Ronda, Universidad de Málaga.
- 2000-2004 Top High School Transcripts by the Real Maestranza de Caballería de Ronda, Universidad de Málaga.
- 2000 Silver medal on the Iberoamerican Mathematical Olympiad, Venezuela.
 Honorable mention on the International Mathematical Olympiad, South Korea.
 Gold medal on the Spanish Mathematical Olympiad, Mallorca, Spain.
 First prize on the Regional Mathematical Olympiad, Málaga.

PUBLICATIONS

- 2011 *Twisted K-theory for actions of Lie groupoids and its completion theorem.* Mathematische Zeitschrift: Volume 268, Issue 1 (2011), 559-583.
Equivariant K-theory, groupoids and proper actions. Accepted for publication in the Journal of K-theory, DOI: 10.1017/is011011005jkt173.
- 2009 *Equivariant K-theory, groupoids and proper actions.* Ph.D. Thesis.

PREPRINTS / IN PROGRESS

- Nilpotent p -local finite groups.* Joint with Jérôme Scherer and Antonio Viruel. Preprint available at arXiv:1107.5158, submitted for publication.
- Unitary embeddings of p -local compact groups.* Joint with Natàlia Castellana. In preparation.

INVITED CONFERENCE LECTURES

- 2010 *Completion theorems for groupoid actions.* Topologists from Málaga around the world, Universidad de Málaga.
- 2009 *Twisted K-theory and groupoids.* Cascade topology seminar, University of British Columbia.
- 2008 *Equivariant K-theory, groupoids and proper actions.* Fall Western Section Meeting of the AMS, University of British Columbia.
- Equivariant K-theory, groupoids and proper actions.* Second Canada-France congress, Université du Québec, Montreal, Canada.

SEMINAR LECTURES GIVEN

- 2012 *An introduction to localization and completion,* Topology Progress Seminar, Stanford University.
Nilpotent p -local finite groups. Topology Seminar, University of Copenhagen.
- 2011 *Nilpotent p -local finite groups.* Algebraic Topology Seminar, Universitat Autònoma de Barcelona.
Nilpotent p -local finite groups. Topology Progress Seminar, Stanford University.
Combinatorial models for p -completions of compact Lie groups. Topology Seminar, University of British Columbia.
Combinatorial models for p -completions of compact Lie groups. Topology Seminar, Stanford University.
- 2010 *Normal cobordism and spherical bundles.* Topology Progress Seminar, Stanford University.
Normal cobordism and the classification of smooth manifolds. Topology Progress Seminar, Stanford University.

- About the norm map.* Algebraic Topology Seminar, Universitat Autònoma de Barcelona.
- K-theory and reality.* Algebraic Topology Seminar, Universitat Autònoma de Barcelona.
- The category of spectra is stable.* Junior Topology Seminar, Universitat Autònoma de Barcelona.
- 2009 *Sullivan's arithmetic square.* Junior Topology Seminar, Universitat Autònoma de Barcelona.
- Groupoid actions and equivariant K-theory.* Algebraic Topology Seminar, Universitat Autònoma de Barcelona.
- The equivariant nature of groupoids.* Algebraic Topology Seminar, University of Münster, Germany.
- The equivariant nature of groupoids.* Algebraic Topology Seminar, University of Düsseldorf, Germany.
- 2008 *Equivariant K-theory, groupoids and proper actions.* Algebra/Algebraic Topology Seminar, University of British Columbia.
- The completion theorem for groupoids.* Algebra/Algebraic Topology Seminar, University of British Columbia.
- 2007 *Equivariant K-theory for actions of loop groups.* Algebra/Algebraic Topology Seminar, University of British Columbia.
- 2006 *Hilbert's fifth problem and locally compact groups.* Learning Seminar in Topology, University of British Columbia.
- Equivariant K-theory of simply-connected Lie groups.* Learning Seminar in Topology, University of British Columbia.
- Twisted K-theory.* Learning Seminar in Topology, University of British Columbia.
- K-theory and Bott periodicity.* Learning Seminar in Topology, University of British Columbia.
- Vector bundles and K-theory.* Learning Seminar in Topology, University of British Columbia.

PARTICIPATION IN RESEARCH GRANTS

- 2010-Now Collaborator for MTM2010-20692: Local analysis of groups and topological spaces.
- 2009-2010 Collaborator for MTM2007-61545: Multiplicative structures in topology and homotopy theory.

TEACHING

- 2012 Instructor, MATH 215b: Graduate course in algebraic topology, Stanford University.
Instructor, MATH 283: Cohomology of finite groups, Stanford University.
- 2011 Instructor (2 sections) and coordinator, MATH 41: Accelerated introduction to differential and integral calculus of functions of one variable, Stanford University.

- Instructor, MATH 19: Introduction to differential calculus of functions of one variable, Stanford University.
- Instructor, MATH 215b: Graduate course in algebraic topology, Stanford University.
- 2010 Instructor (2 sections), MATH 41: Accelerated introduction to differential and integral calculus of functions of one variable, Stanford University.
- 2008 Instructor, MATH 104: Differential calculus with applications to commerce and social sciences, University of British Columbia.
- 2004-2009 Teaching Assistant: Calculus, Linear Algebra and Applied Linear Algebra, University of British Columbia.

PROFESSIONAL DEVELOPMENT SEMINARS AND WORKSHOPS ATTENDED

- 2012 Workshop "How to give effective feedback", Stanford University.
- Workshop "Adapting to different communication styles and setting clear expectations", Stanford University.
- 2011 Seminar "Designing Courses in Science and Engineering", Stanford University.
- Seminar "Advice for new faculty: Managing time and juggling new roles", Stanford University.
- Seminar sequence "Scientific Management Series", Stanford University.
- 2009 Instructional Skills Workshop, University of British Columbia.
- Seminar "Inclusivity", Teaching and Academic Growth (TAG), University of British Columbia.
- Seminar "Leading discussions", TAG, University of British Columbia.
- Seminar "Teaching in large classrooms", TAG, University of British Columbia.
- Seminar "Marking and evaluation", TAG, University of British Columbia.
- Seminar "Learning styles", TAG, University of British Columbia.
- Seminar "Ethics and effectiveness of group work", TAG, University of British Columbia.
- Workshop "Time management and business etiquette", Mathematics of Information Technology and Complex Systems (MITACS).
- 2004 Preparatory course "MATH 599: Mathematics teaching techniques", University of British Columbia.

SEMINAR ORGANIZATION

- 2010-Now Co-organizer of the Topology Progress Seminar, Stanford University.
- 2006-2007 Organizer of the Learning Seminar in Topology, University of British Columbia.

RESEARCH CONFERENCES AND WORKSHOPS ATTENDED

- 2011 Summer school "String topology, compactified moduli spaces and algebraic structures", UC Berkeley.
- 2010 Symposium "Chern-Simons theory: Applications to Geometry and Physics", Stanford University.
- Conference "Group actions in topology and geometric group theory", Adam Mickiewicz University, Poznan, Poland.
- Conference "Advanced Course on Foliations: Dynamics-Geometry-Topology", Centre de Recerca Matematica.
- Conference "Topologists from Málaga around the world", Universidad de Málaga.
- 2009 Barcelona topology workshop, Centre de Recerca Matematica.
- Cascade topology seminar, University of British Columbia.
- 2008 Fall Western Section Meeting of the AMS, University of British Columbia.
- Second Canada-France congress, Université du Québec.
- Workshop "String topology and the topology of moduli spaces", Stanford University.
- 2007 Conference "Topology", Banff International Research Station, Canada.
- 2006 Conference "Groups in geometry and topology", Universidad de Málaga.
- Workshop "Stringy topology in Morelia", UNAM Morelia, Mexico.
- 2005 Conference "Homotopy theory and group actions", Banff International Research Station.
- PIMS summer school "Topics in homotopy theory", University of Calgary, Canada.
- 2004 Seminar "An introduction to K-theory for C*-algebras", Universidad de Málaga.
- 2003 Seminar "An introduction to C*-algebras", Universidad de Málaga.

REFERENCES

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